

CCL, CC chemokine ligand; CRIC3, n-nonanoyl-CCL14[10-14]; bis-NNY-CCL14[10-74], Bis-n-nonanoyl-CCL14[10-74]; RANTES, regulation upon activation and T cell secreted; BALF, bronchoalveolar lavage fluid; AHR, airway hyper responsiveness; OVA, ovalbumin

Fig. 1:.

Alignment of N-terminal sequences of CCL14 derivatives and CCL11.

The cleavage motif for CD26/DPP IV of CCL14[9-74] and CCL11 (eotaxin) is marked in gray.

10 Fig. 2:

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CRIC3 induces the release of reactive oxygen species (ROS) from human eosinophils with more potency than CCL11.

The release of ROS was measured using lucigenin-dependent chemiluminescence. Human eosinophils were stimulated with different concentrations of the indicated chemokine. Data (n=7) are expressed as relative ROS release that is expressed as the ratio of stimulus-stimulated and medium-stimulated cells.

Fig. 3:

CRIC3 induces an internalization of CCR3 from human eosinophils in the same range than CCL11.

Human eosinophils were treated with the indicated CCL14 derivatives (10^{-7} M) and CCL11(10^{-7} M), respectively, for 30 min at 37°C. Thereafter cells were stained with anti-CCR3 mAb and analyzed by flow cytometry. A: Data (n=4) are expressed as the mean \pm SEM of relative fluorescence intensity as described in *Materials and Methods*. B: Histogram analysis of one representative experiment shown in Fig. A. Bold line, anti-CCR3 staining before chemokine treatment; dotted line, isotype control; broken line, anti-CCR3 staining after chemokine treatment. C: Cells were incubated with the

Claims

- A method of inhibiting the emigration of cells from the intravascular compartment into tissues (or through any membrane limiting any body compartment from another) by confronting the cells with an agonist specific for receptors involved with migration of said cells via a receptor thereby making the cell unresponsive to further activation.
- 2. A method according to claim 1, wherein the cells are blood circulating cells and the intravascular compartment is the blood stream.
- 3. The method of claim 1 wherein the cells are leukocytes.

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- 4. The method of claim 1 or 3 wherein the cell is unresponsive to further activation for emigration to tissues after confrontation with an agonist.
 - 5. The method according to claims 1 to 4 wherein the agonist used to inhibit the migration of the cells is a chemoattractant binding to a corresponding receptor or molecule binding to such a receptor.
- 15 6. The method of claim 5 wherein the chemo-attractant is selected from the group consisting of chemokine, a defensine, a leukotriene, a formyl-peptide or combinations thereof as well as mutants and/or variants of the chemoattractant.
- 7. The method of claim 1 to 6 wherein the compound is selected from the group consisting of

R¹-CCL14[10-74], R1-CXCL12[1-67], R1-CXCL12V3I[1-67], R1-CXCL12[2-67], R1-CXCL12V3I[2-67], R1-CXCL12V3I[1-72], R1-CXCL12V3I[1-72]

wherein R¹ is a lipophilic, hydrophobic or polar aprotic residue.

- 25 8. The method of at least one of the claims 1 to 7, wherein R¹ is any organic residue having up to 50 carbon atoms, which may be substituted by hetero atoms, and which organic residue is branched, unbranched, saturated, unsaturated or combinations thereof.
- 9. The method of claim 8, wherein R¹ is an aromatic moiety, polyethylenoxid, moiety with 2 to 18 units, comprising residue.

10. The method of claim 7, wherein R^1 is any amino acid, or CH_3 - $(CH_2)_n$ -X; in which

(CH₂)_n is branched or unbranched

X is $-C(O)-NH-CH_2-C(O)-$, $-NHCH_2-C(O)-$, $-ONH-CH_2-C(O)-$,

 $-OCH_2-CH_2-C(O)-$, -CH=CH-C(O)-, -C(O)-, or a covalent bond; and n is an integer of 1-17;

or pharmaceutically acceptable salt thereof.

- 11. A method of treating a disease state in mammals that is alleviated by treatment with a compound of at least one of the claims 7 to 10, which method comprises administering to an mammal in need of such a treatment a therapeutically effective amount of the compound.
- 12. The method of claim 5 wherein said method inhibits inflammation.
- 13. Use of an agonist specific for receptor involved with migration of blood circulating cells from the blood stream for the manufacturing of a medicament for the treatment of diseases associated with migration of blood cells from the blood stream into tissues.
- 14. Use according to claim 13 wherein the agonist is a chemo-attractant.
- 15. Use according to claim 13 wherein the chemo-attractant is selected from the group consisting of chemokine, defensin, leukotriene, formyl-peptides as well as mutants and/or variants of the chemo-attractants.
- 16.Use of a compound of the method of at least one of the claims 7 to 10 for the manufacturing of a medicament for the treatment of diseases associated with migration of blood cells from the blood stream into tissues.

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